

## CLAIMS

1. Radio communication repeater characterized in that it includes:

- 5                   - a first path (10 to 16) to receive signals in a first frequency band, to translate the received signals into a second frequency band and to transmit in the second frequency band,
- 10                   - a second path (20 to 26) to receive signals in the second frequency band, to translate the received signals into the first frequency band and to transmit in the first frequency band.

2. Repeater according to Claim 1, characterized in that it includes a management circuit (30 to 35) to disable transmission from the first path if the second path receives signals first, and to disable transmission from the second path if the first path receives signals first.

3. Repeater according to Claim 2, characterized in that the management circuit includes thresholding means (30, 31) to compare the received signals with a receive threshold, the signals being considered received if they are above the said threshold.

4. Repeater according to one of Claims 1 to 3, characterized in that the first path includes a first translation means (12) to translate the signals from the first frequency band to an intermediate frequency band and a second translation means (14) to translate the signals from the intermediate frequency band to the second frequency band, in that the second path includes a first translation means (22) to translate the signals from the second frequency band to the intermediate frequency band and a second translation means (24) to translate the signals from the intermediate frequency band to the first frequency band, and in that the repeater includes a first local oscillator (OSC1) cooperating with the first translation means (12) of the first path and the second translation means (24) of the second path, and a second local oscillator (OSC2) cooperating with the second translation means (14) of the first path and the first translation means (22) of the second path.

5. Repeater according to Claim 4 when it depends on Claim 3, characterized in that the thresholding means (30, 31) compare the signals (M1, M2) in the intermediate frequency band.

5            6. Repeater according to one of Claims 2 to 5, characterized in that the management circuit disables the transmission means of the first and second paths when no signal is received by the first and second paths.

10           7. Repeater according to one of Claims 2 to 6, characterized in that the disabling of the transmission means of the first and second paths is carried out by cutting the power to amplifiers (16, 26).